Commander Kimberly Colloton  
Department of the Army  
Albuquerque District, Corps of Engineers  
4101 Jefferson Plaza NE  
Albuquerque, NM 87109-3435  

Re: Ready for Reuse Determination – Former Atlas Missile Silo Site 12, Roswell, New Mexico  

Dear Commander Colloton:  

The United States Environmental Protection Agency (EPA) Region 6, in concurrence with the New Mexico Environment Department, has determined that the Former Atlas Missile Silo Site 12 surface property is Ready for Reuse. A Ready for Reuse Determination is an acknowledgment that environmental conditions on the property are protective for its current and anticipated future use.  

The Former Atlas Missile silo is located in west-central Chaves County, approximately 18 miles north of Roswell, New Mexico, along U.S. Highway 285. The Department of Defense (DOD) acquired the 240.80 acre property in 1960 through the following means: 15.75 acres in fee by condemnation and 225.05 in easement. Construction of the missile launching facility began in 1960 and was completed in November 1961. In May 1964 the DOD announced that the Atlas “F” missile program was to be phased out and in September 1965 silo site 12 was declared excess to the General Service Administration (GSA). In October 1967, the GSA conveyed the 15.75 acres simple fee and 1.87 acres in easement to W.L. Pennington and Cliff C. Henderson, partners of Henderson Oil Properties, Inc. In September 1966, the remaining easements expired following non-use for a period exceeding one year as stipulated in the acquisition documents. At the start of the Site Inspection (SI), the owners of the property were David P. and Carolyn Hinckley.  

A Preliminary Assessment (PA) and Site Inspection (SI) were conducted, under the Defense Environmental Restoration Program, by the U.S. Army Corps of Engineers (USACE) to determine whether an immediate or potential threat to human health and the environment exists at the site as a result of DOD activities and whether further action is warranted. In March 2008, the USACE completed an SI of silo site 12. The soil assessment component of the SI at silo site 12 examined the potential release of hazardous constituents to surface and subsurface soil from three (3) potential source areas: the former Underground Storage Tank (UST) area, the septic leachfield, and the soil sump outfall. With the exception of the sump outfall area, no hazardous constituents were found at concentrations above evaluation criteria in soil samples collected from the former UST location or the septic tank leachfield. Five analytes were detected in soil samples from the outfall trench at concentrations exceeding their respective evaluation criteria. All exceedances were polynuclear aromatic hydrocarbons (PAHs) detected in soil samples collected from the upper soil horizon (0 to 5 inches below the bottom of the outfall pipe). The USACE undertook voluntary removal actions and the PAH impacted soil was excavated, transported, and disposed of at a licensed disposal facility. Before filling the excavation with clean soil, five confirmation soil samples were collected to verify removal of PAH impacted soil. The results of the confirmation soil sampling indicate that the concentration of benzo(a)pyrene in the soil sample, collected from the north wall just below the outfall pipe, exceeded the EPA Region 6 evaluation of 15 μg/kg. However, this concentration does not exceed the New Mexico Environment Department (NMED) residential soil screening level of 621μg/kg. No other PAH concentrations exceed laboratory reporting limits.  

During the SI, groundwater was not encountered within the study boundary of 250 feet bgs. Based upon a camera survey of the two on-site production wells, no groundwater is present beneath silo site 12 to 400 feet bgs. Therefore, no monitoring wells were installed or monitored during the SI. Standing water in the silo was sampled to determine whether
hazardous constituents are present in the silo water that could potentially migrate into groundwater. Antimony concentrations in silo water collected exceeded the evaluation criteria. Supplemental silo water sampling was conducting in June 2008. The source of the antimony in silo water is not known but based on the thickness of the silo walls, the lack of a groundwater unit beneath the study boundary (250 feet bgs), and geochemistry of the vadose zone, antimony in silo water is not expected to impact groundwater beneath the site. Environmental conditions of the property are summarized in Enclosure 1 to this letter.

The Ready for Reuse Determination is based on a review of all relevant corrective action documents (collectively, the “Documentation”) for Former Atlas Missile silo site 12 (the “Property”), which are listed in Enclosure 2. NMED concurred with a Finding of No Defense Action Indicated in February 2009. With this Ready for Reuse Determination, the EPA deems that the USACE has successfully completed its investigation and that environmental conditions at the property are protective of human health and the environment. The Documentation demonstrates that, although releases of chemical constituents have occurred as a result of DOD activities on the Property, corrective action was completed and residual concentrations do not require further removal or remedial action to protect human health or the environment, based on the evaluation criteria of the most conservative of either the NMED Soil Screening Levels or the EPA Region 6 Human Health Medium-Specific Screening Levels for residential exposure.

Copies of the documents listed in Enclosure 2 may be obtained from either NMED, Hazardous Waste Bureau, 2905 Rodeo Park Drive East, Building 1, Santa Fe, New Mexico 87505-6303, USACE, Albuquerque District, 4101 Jefferson Plaza, NE, Albuquerque, New Mexico 87109, or Region 6 EPA, 6PD-F, 1445 Ross Ave Ste 1200, Dallas, Texas 75202.

If conditions at the property change, including environmental conditions, land use, and site receptors, it will be necessary to revisit this determination of suitability for reuse to ensure its continuing protectiveness. The undersigned expressly reserves all rights and authorities to require future action by owners, operators, or USACE if new or additional information comes to light that materially impacts this Ready for Reuse Determination, whether such information is known as of this date, or is discovered in the future.

Congratulations on this most noteworthy accomplishment!

Sincerely,

[Signatures]

Laurie King
Chief, Federal Facilities Section
Multimedia Planning and Permitting Division
EPA, Region 6

Ron Curry
Cabinet Secretary
New Mexico Environment Department

Brian Jordan
Atlas Project Manager
US Army Corps of Engineers
Albuquerque District

Enclosures:
1) Current Environmental Conditions Table
2) Relevant Documents List
### Enclosure 1

#### Former Atlas F Missile Silo Site No. 12
**Current Environmental Conditions Table**

<table>
<thead>
<tr>
<th>Site Name/Site Number</th>
<th>Remedial Action Taken</th>
<th>Residual Contaminants of Concern (CoCs)(^a)</th>
<th>Clean-up Status</th>
<th>Clean-up Standard</th>
<th>Institutional Control(s) (Type/Purpose/Location)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Soil</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sump Outfall Area (Post Remediation)</td>
<td>Excavation and Disposal</td>
<td>Benzo(a)pyrene 2.53 to 23.1 µg/kg(^b)</td>
<td>No detection or detection below clean-up standard in confirmation soil sampling</td>
<td>15 µg/kg</td>
<td>None</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Benzo(a)anthracene 2.53 to 43.4 µg/kg</td>
<td></td>
<td>150 µg/kg</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Indeno(1,2,3-cd)pyrene 2.53 to 15.7 µg/kg</td>
<td></td>
<td>150 µg/kg</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Dibenzo(a,h)anthracene 2.53 to 5.61 µg/kg</td>
<td></td>
<td>15 µg/kg</td>
<td></td>
</tr>
<tr>
<td><strong>Groundwater</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Silo Water</td>
<td>None</td>
<td>Antimony 0.0101 to 0.0115 mg/L</td>
<td>See Note 1</td>
<td>0.006 mg/L</td>
<td>None</td>
</tr>
<tr>
<td></td>
<td></td>
<td>TDS 416 mg/L</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

No groundwater was encountered to the study boundary of 250 bgs.

---

\(^a\) Information based on Site Investigation (SI) Report and Supplemental SI Report prepared by Shaw Environmental in 2008.

\(^b\) The results of the confirmation soil sampling indicate that the concentration of benzo(a)pyrene in the soil sample, collected from the north wall just below the outfall pipe, exceeded the EPA Region 6 evaluation of 15 µg/kg. However, this concentration does not exceed the New Mexico Environment Department (NMED) residential soil screening level of 621 µg/kg. No other PAH concentrations exceed laboratory reporting limits.

**Note 1:** The source of the antimony in silo water is not known but based on the thickness of the silo walls, the lack of a groundwater unit beneath the study boundary (250 feet bgs), and geochemistry of the vadose zone, antimony in silo water is not expected to impact groundwater beneath the site.
Enclosure 2

Relevant Documents List

Former Atlas “F” Missile Silo Site No. 12
Formerly Used Defense Site Project ID No. K06NM0490


